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Motivating knowledge sharing through a knowledge management system ☆

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Abstract

Based on both economic and sociological theory, the effects of supervisory control and organizational support on the frequency and effort of individuals in contributing their personally held valuable knowledge to a "best practices-lessons learned, repository-based" knowledge management system (KMS) were compared. Supervisory control, as expected, had significant impact on frequency, but it also had unexpectedly significant influence on effort. When system variables—usefulness and ease of use—were controlled for, the organizational support measure had little effect on either outcome. These results provide greater support for economic-agency-theory motivators of knowledge sharing and lesser support for organizational support motivators than has been previously believed. They also emphasize the important impact of systems variables in motivating KMS use. Since the study was conducted in a government (joint civilian–military) organization, the organizational type may significantly influence the results. However, since the result is contrary to the conventional wisdom that suggests that a "knowledge-sharing culture" is all-important, at the very least, this study shows that the nature of the organization may moderate the relationship between the motivational approach and the outcomes.

Keywords: Knowledge sharing; Perceived organizational support; Supervisory control; Knowledge management systems; Motivation; Effectiveness

1. Introduction

Modern processes and systems enable the sharing of organizational knowledge in new ways [1,2]. Scholars and practitioners in various fields have turned their attention to knowledge management systems (KMS) as a means of sharing knowledge in organizations [3,4]. Many KMSs are designed to capture individuals' knowledge so that the broader organization can benefit from its dissemination.

The strategy of utilizing a KMS to capture and distribute knowledge often requires that individuals contribute their knowledge to a system instead of keeping it to themselves or sharing it directly with known others only through conversations or written personal exchanges. Presumably, some individuals in some organizational cultures follow the "knowledge is power" dictum by hoarding knowledge and sharing it only

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when externally motivated to do so [5–7]. Even willing contributors may sometimes be reluctant to share when they do not know who may benefit from the shared knowledge [8].

This study addresses two primary factors that may influence the behavior of individuals who contribute knowledge to a KMS. The question, "How to best motivate individuals to contribute their knowledge to a KMS?", has been ranked as the fourth most important issue in KM by high-level KM practitioners [9]. As well, Alavi and Leidner [10] identify "incentives for knowledge contribution and sharing" as an important research issue in KM.

This study focuses on the individual who is a potential knowledge sharer and the potential effects of two motivational approaches—supervisory control and perceived organizational support—on knowledge sharing behavior. Outcomes are assessed in terms of the frequency of contributions of knowledge made to a system and the effort the individual intends to exert to share knowledge that he/she believes will benefit the organization.

2. Background and theory

The knowledge possessed by a firm represents a strategic resource that can create competitive advantage [11–14]. A firm's knowledge is the result of years of organizational activity in which the knowledge of individuals is combined into a collective whole [15].

The emphasis on collective knowledge created through a combinative process focuses attention on the issue of how organizations should motivate and support employees who may have useful knowledge that might be shared through a KMS [16].

One approach to motivation is illustrated by Perlow [17], who studied knowledge workers in a software development group where the management of the organization instituted a stringent means of controlling the employees. The company imposed strict demands by monitoring employees, by observing them closely, and by routinely checking up on them. Management instituted mandatory meetings, deadlines, and extra work to ensure that the employees were working in the best interest of the firm.

Other organizations utilize a very different means of motivating their knowledge workers. Nair [18] posits that managers of knowledge workers should institute team-based management styles if they wish to get the most out of their employees. Alvesson [19] illustrated this approach in a case study of a computer consulting company. The study found that the management felt that the company operated efficiently because management strove to have a strong interpersonal culture in the organization. This culture was based on focusing on the organization as a community instead of viewing it as merely a collection of individuals.

These quite different methods of motivating knowledge workers' performance—which can roughly be termed "supervisory control" versus "social exchange"—provide a foundation for assessing the factors that influence individuals to share knowledge through a KMS.

2.1. Supervisory control

Supervisory control is a factor that should have an important impact on an individual's willingness to share his/her knowledge through a KMS [20]. Supervisory control is defined as efforts by management to increase the likelihood that individuals will act in ways that will result in the achievement of organizational objectives [21,22]. Supervisory control is important because an assumption in agency theory, which has been quite successful in demonstrating a positive effect on the behaviors exhibited in a principal–agent relationship, and in some other management literature, is that the goals of the employer and the employee are, to some degree, divergent. This necessitates control in order to align the goals of the two actors [23]. The exact nature of the supervisory control mechanisms needed to produce goal congruence is unresolved because of the widely-varied types of control mechanisms that have been utilized and studied [24–27].

Agency theory presents a rational view of individuals as seeking to maximize their individual utility [28]. This rational view, however, may not account for the variation in contributions to a KMS. For instance, an individual may contribute to a KMS specifically because of instituted controls without regard to the efficacy of their contribution. If this occurs on a large scale, the system may suffer from an overabundance of contributions that provide little real value to the organization [29].

2.2. Social exchange among individuals

Social exchange theory posits that people contribute to others commensurate with the contributions that they perceive are being made by others to them [30]. This theory views the contributions that individuals make to an organization as elements of reciprocal arrangements [31]. Reciprocal arrangements occur when an individual performs some type of action for another individual,